

We claim:

1. A substantially purified nucleic acid molecule, said nucleic acid molecule capable of specifically hybridizing to a second nucleic acid molecule having a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 20082 or complements thereof. 1

2. The substantially purified nucleic acid molecule according to claim 1, wherein said nucleic acid molecule comprises a region having a single nucleotide polymorphism.

3. A transformed cell having a nucleic acid molecule which comprises:  
(A) an exogenous promoter region which functions in said cell to cause the production of a mRNA molecule; which is linked to

(B) a structural nucleic acid molecule, wherein said structural nucleic acid molecule encodes a protein or fragment thereof selected from the group consisting of a *Glycine max* protein or fragment thereof in Table 1; which is linked to

(C) a 3' non-translated sequence that functions in said cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of said mRNA molecule.

4. The transformed plant according to claim 3, wherein said structural nucleic acid molecule is in the antisense orientation.

5. The transformed plant according to claim 3, wherein said plant is a dicot.

6. The transformed plant according to claim 3, wherein said plant is a monocot.

7. A transformed plant having a nucleic acid molecule which comprises:

(A) an exogenous promoter region which functions in a plant cell to cause the production of a mRNA molecule wherein said promoter nucleic acid molecule is selected from

the group consisting of SEQ ID NO:1 through SEQ ID NO:20082 or complements thereof or fragment of either; which is linked to

(B) a structural nucleic acid molecule encoding a protein or peptide; which is linked to

(C) a 3' non-translated sequence that functions in a plant cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of said mRNA molecule.

8. The transformed plant according to claim 7, wherein said structural nucleic acid molecule is in the antisense orientation.

9. The transformed plant according to claim 7, wherein said plant is a dicot.

10. The transformed plant according to claim 7, wherein said plant is a monocot.

11. A method for determining a genomic polymorphism in a plant that is predictive of a trait comprising the steps:

(A) incubating a marker nucleic acid molecule, under conditions permitting nucleic acid hybridization, and a complementary nucleic acid molecule obtained from said plant, said marker nucleic acid molecule having a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 20082 or complements thereof;

(B) permitting hybridization between said marker nucleic acid molecule and said complementary nucleic acid molecule obtained from said plant; and

(C) detecting the presence of said polymorphism.